

2SA1739G

Silicon PNP epitaxial planar type

For high speed switching Complementary to 2SC3938G

■ Features

- High speed switching
- ullet Low collector-emitter saturation voltage $V_{\text{CE(sat)}}$
- S-Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V _{CBO}	-15	V
Collector-emitter voltage (Base open)	V _{CEO}	-15	V
Emitter-base voltage (Collector open)	V_{EBO}	-4	V
Collector current	I_C	-50	mA
Peak collector current	I_{CP}	-100	mA
Collector power dissipation	P _C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

■ Package

Code SMini3-F2

Marking Symbol: AX

• Pin Name

1. Base

2. Emitter

3. Collector

■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -8 \text{ V}, I_{E} = 0$			- 0.1	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{CE} = -3 \text{ V}, I_{C} = 0$			- 0.1	μΑ
Forward current transfer ratio	h _{FE1} *	$V_{CE} = -1 \text{ V}, \ I_{C} = -10 \text{ mA}$	50		150	_
	h _{FE2}	$V_{CE} = -1 \text{ V}, I_{C} = -1 \text{ mA}$	30			
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$		- 0.1	- 0.2	V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}, I_E = 10 \text{ mA}, f = 200 \text{ MHz}$	800	1 500		MHz
Collector output capacitance	C _{ob}	$V_{CB} = -5 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		1		pF
(Common base, input open circuited)						
Turn-on time	t _{on}	Refer to the switching time		12		ns
Turn-off time	t _{off}	measurement circuit		20		ns
Storage time	t _{stg}			19		ns

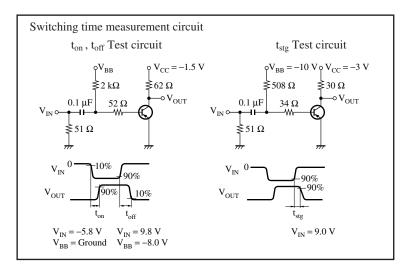
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

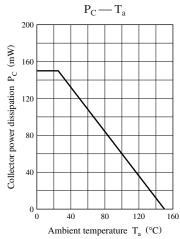
2. *: Rank classification

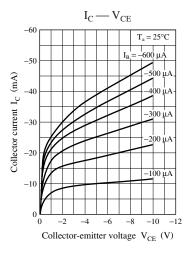
Rank	Q	R	No-rank
$h_{\rm FE1}$	50 to 120	90 to 150	50 to 150
Marking symbol	AXQ	AXR	AX

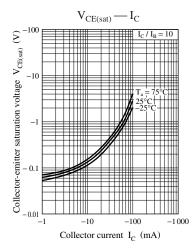
Product of no-rank is not classified and have no marking symbol for rank.

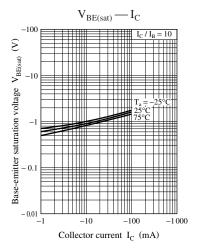
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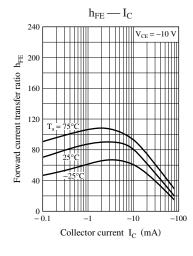


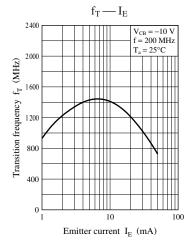


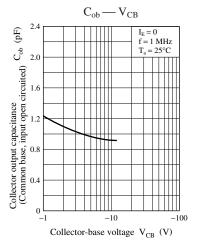






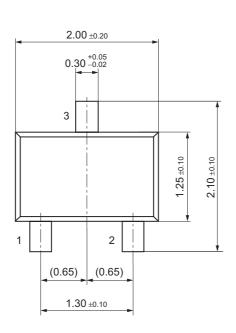


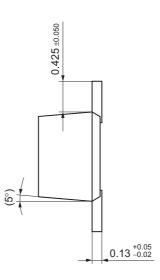




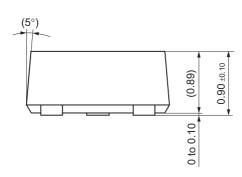
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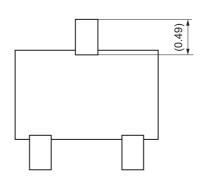
SMini3-F2 Unit: mm











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